Georgia Department of Natural Resources
2 Martin Luther King, Jr. Drive, S.E., Suite 1462 East, Atlanta, Georgia 30334-9000
Chris Clark, Commissioner
Environmental Protection Division
Carol A. Couch, PhD., Director
404-657-8600

April 17, 2009

Mr. Jason Booth
On-Scene Coordinator
Region 4 U.S. EPA
61 Forsyth Street
Atlanta, GA 30303

Subject: Request for Identification of State ARARs
Former Virginia-Carolina Chemical Corporation
Albany, Dougherty County, Georgia

Dear Mr. Booth:

As requested by the United States Environmental Protection Agency (U.S. EPA), the Georgia Environmental Protection Division (GA EPD) is providing Applicable or Relevant and Appropriate Requirements (ARARs) for the subject site. The GA EPD has identified its rules, the Rules for Hazardous Waste Management, Chapter 391-3-11, and the Rules for Hazardous Site Response, Chapter 391-3-19 (Rules), and its laws, the Georgia Hazardous Waste Management Act, O.C.G.A Section 12-8-60 et seq., and the Georgia Hazardous Site Response Act, O.C.G.A Section 12-8-90 et seq. (Acts) as ARARs for the remediation for this site. These Rules and Acts are available online at www.gaepd.org.

Specifically, the following sections are ARARs regarding the removal, packaging, transportation, and disposal of hazardous wastes including contaminated soil at the site:

- Section 391-3-11-.04 "Notification of Hazardous Waste Activities"
  - Every hazardous waste generator, transporter, and owner or operator of a hazardous waste storage, treatment, or disposal facility shall notify GA EPD of such activities on forms provided by the Director. The U.S. EPA Form 8700-12 may be used to notify the GA EPD of any regulated waste activity.
- Section 391-3-11-.08 "Standards Applicable to Generators of Hazardous Waste"
  - Incorporates 40 CFR part 262 (2004) by reference; and
  - Hazardous Waste Manifests shall be on forms as designated by the Director of EPD and shall be completed as required by the instructions supplied. The U.S. EPA Form 8700-22 Uniform Hazardous Waste Manifest may be used.
- Section 391-3-11-.16 "Land Disposal Restrictions"
  - Incorporates 40 CFR part 268 (2004) by reference with exceptions
- Section 391-3-19-.07 "Risk Reduction Standards"
  - Section 391-3-19-.07(6) and (7): These sections outline the process for determining residential cleanup standards referred to as Type 1 standards and Type 2 standards, respectively. Type 1 standards are based on established soil concentrations that are protective of groundwater and human health using default exposure assumptions in Equations 6 and 7 of RAGS, Part B[1]. Type 2 standards require the protection of groundwater based on site specific leaching laboratory analysis or fate and transport modeling and protection of human health through site specific exposure assumptions in Equations 1 and 2 of RAGS, Part B. The Type 1 standards for arsenic and lead in soil are specified below in Table 1.

[1] RAGs, Part B – "Risk Assessment Guidance for Superfund: Volume 1 – Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals), USEPA document EPA/540/R-92/003, December 1991

Table 1: Default Residential (Type 1) Risk Reduction Standards

contaminant	soil concentration (mg/kg)
arsenic	20
lead	75

- Section 391-3-19-.07(8) and (9): These sections outline the process for determining non-residential cleanup standards referred to as Type 3 standards and Type 4 standards, respectively. Type 3 standards are based on established soil concentrations that are protective of groundwater and for soil within the top two feet, and protective of human health using default exposure assumptions in Equations 6 and 7 of RAGS, Part B. Type 4 standards require the protection of groundwater based on site specific leaching laboratory analysis or fate and transport modeling and protection of human health through site specific exposure assumptions in Equations 1 and 2 of RAGS, Part B. Both of these standards require a corrective action plan to insure the property remains non-residential and notices in any deed or other instruments conveying a use of the property that the site is contaminated and requires corrective action. The Type 3 standards for arsenic and lead in soil are specified below in Table 2:

Table 2: Default Non-Residential (Type 3) Risk Reduction Standards

contaminant	soil concentration (mg/kg)
arsenic	38
lead	400

- Section 391-3-19-.07(10): This section outlines the process for addressing those instances where the application of Type 1 – 4 is not appropriate under present circumstances and is referred to as Type 5 standards. Type 5 standards allow the use of measures such as engineering controls and institutional controls. Please note that institutional controls should not be substituted for active remedial measures unless such active measures are determine not to be practicable. These standards require long term monitoring and maintenance plus a restrictive covenant in any deed or other instruments conveying a use of the property that the site is contaminated and requires corrective action.

  Please contact the Hazardous Sites Response Program with site-specific values if the USEPA proposes to implement the Type 2, 4, or 5 standards, or if additional contaminants are detected.

If you have any questions regarding this matter, please contact David Hayes at 404-657-8600.

Sincerely,

Alexandra Y Cleary for

Mark Smith, Chief
Hazardous Waste Management Branch

File: purple file (VCC Albany)
S:\RDRIVE\dhayes\my sites\VCC Albany\ARAR letter to Jason Booth.doc